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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
08/915,683	08/21/97	FUJITA	038612-1

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EXAMINER
FUJITA, M

ART UNIT	PAPER NUMBER
1113	

DATE MAILED: 12/04/97

Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trad marks

Office Action Summary

Application No.

08/915,683

Applicant(s)

Fujita et al.

Examiner

Mark F. Huff

Group Art Unit

1113



☒ Responsive to communication(s) filed on Sep 23, 1997

☐ This action is **FINAL**.

☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

A shortened statutory period for response to this action is set to expire 3 month(s), or thirty days, whichever is longer, from the mailing date of this communication. Failure to respond within the period for response will cause the application to become abandoned. (35 U.S.C. § 133). Extensions of time may be obtained under the provisions of 37 CFR 1.136(a).

Disposition of Claims

☒ Claim(s) 1 and 5-9 is/are pending in the application.

Of the above, claim(s) _____ is/are withdrawn from consideration.

☐ Claim(s) _____ is/are allowed.

☒ Claim(s) 1 and 5-9 is/are rejected.

☐ Claim(s) _____ is/are objected to.

☐ Claims _____ are subject to restriction or election requirement.

Application Papers

☐ See the attached Notice of Draftsperson's Patent Drawing Review, PTO-948.

☐ The drawing(s) filed on _____ is/are objected to by the Examiner.

☐ The proposed drawing correction, filed on _____ is ☐ approved ☐ disapproved.

☐ The specification is objected to by the Examiner.

☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. § 119

☒ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).

☒ All ☐ Some* ☐ None of the CERTIFIED copies of the priority documents have been
☐ received.

☒ received in Application No. (Series Code/Serial Number) 08/474,715.

☐ received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

*Certified copies not received: _____

☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

Attachment(s)

☐ Notice of References Cited, PTO-892

☐ Information Disclosure Statement(s), PTO-1449, Paper No(s). _____

☐ Interview Summary, PTO-413

☐ Notice of Draftsperson's Patent Drawing Review, PTO-948

☐ Notice of Informal Patent Application, PTO-152

--- SEE OFFICE ACTION ON THE FOLLOWING PAGES ---

Art Unit: 1113

DETAILED ACTION

1. This Office Action is in response to the application and preliminary amendment filed August 21, 1997 and the preliminary amendment and unexecuted declaration under 37 C.F.R. 1.132 filed September 23, 1997.

Claim Rejections - 35 USC § 112

2. Claims 1 and 5-9 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

a. The use of the word "type" used throughout the claims is indefinite. See MPEP 2173.05(b) and references therein.

b. The amendment to claim 1 (twice amended) appears to be incorrect. The claim as now-amended does not read properly. Should the additional words have been inserted after "are" instead of after "type"?

c. Claim (Twice Amended) 1 line 8: The phrase "the external shell" has no antecedent basis in the claims. See also claims 5, 7 and 9

d. Claim 1 (Twice amended) lines 15-16 contain an improper Markush group. It should read "the group consisting of ... (A), (B) and (C) ..." . See MPEP 2173.05(h)

e. Claim 5: No antecedent basis for "the silver halide phase"

Art Unit: 1113

f. Claim 5 also has an improper Markush group.

g. The amendment to claim 9 (Amended) is inconsistent with Applicants' remarks which state that this amendment recites that the cores are silver bromide. The amended portion of the claim deals with the "tabular silver halide grains" as a whole and not just the cores of these grains. Essentially, the amendment appears to require that the grains consist of only silver bromide and this would be contradictory to the limitation that the emulsion comprises core/shell grains.

h. Claim 9 (Amended) also has an improper Markush group.

i. Claim 9 (Amended) first line after formula (I), "a dye group" is repeated.

j. Claim 9 (Amended) second line after formula (I), the word "temporarily" is indefinite.

k. Claim 9 (Amended) fourth and sixth line after formula (I), "a" probably should not be underlined.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Art Unit: 1113

4. Claims 1 and 5-9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Evans et al. (US 4,504,570) in view of either Tanemura et al. (US 5,081,009) or Shuto et al. (US 5,110,719).

Evans et al. (US 4,504,570) teach core/shell tabular grains which may be used in direct positive internal latent image systems. Emulsion B contains grains which have a crystal morphology as presently claimed. The "a" and "b" values claimed in the instant application are comparable to those values obtained from the emulsions of Evans et al. (US 4,504,570). However, the primary reference does not teach the sulfur sensitizer as presently claimed.

Either Tanemura et al. (US 5,081,009) or Shuto et al. (US 5,110,719) disclose sulfur sensitizers that have the presently claimed structures (A), (B) or (C). These sensitizers are specifically claimed to be useful for core/shell internal latent image silver halide grains. These compounds are disclosed to provide high sensitivity, low D_{\min} and high D_{\max} in silver halide emulsions. See especially Tanemura et al. (US 5,081,009) 2:62-3:5 and the claims; Shuto et al. (US 5,110,719) 2:5-9 and the claims.

It would have been obvious to incorporate the sulfur sensitizers of either Tanemura et al. (US 5,081,009) or Shuto et al. (US 5,110,719) in the grains of Evans et al. (US 4,504,570), since the secondary references specifically teach the use of the sulfur sensitizers in the type of grains taught Evans et al. (US 4,504,570) with the reasonable expectation of achieving core/shell tabular grain emulsion which will have an increased sensitivity and D_{\max} and a decreased D_{\min} .

Art Unit: 1113

Response to Arguments

5. Applicant's arguments filed September 23, 1997 have been fully considered but they are not persuasive. Applicants have submitted an unexecuted declaration under 37 C.F.R. 1.132 as further evidence for unexpected results. This declaration adds an additional sample to the declaration filed May 22, 1997 in the parent application 08/474,715. (Note: the headings given in the table at the bottom of page 2 of the declaration filed September 23, 1997 are incorrect. The second and third occurrences of "Maximum Density" were interpreted as --Minimum Density-- and --Middle Sensitivity--, respectively, in accordance to Table 4' on page 3 of the declaration filed May 22, 1997.) The combined results from the two declarations show an increase in maximum density, a decrease in minimum density and improved sensitivity when the inventive sulfur sensitizers are used. However, the Examiner believes that these results are the expected results when the sulfur compounds as taught by either Tanemura et al. (US 5,081,009) or Shuto et al. (US 5,110,719) are used. These references clearly teach an increase in maximum density, decrease in minimum density and improved sensitivity when the claimed sulfur compounds are used during sensitization.

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Mark F. Huff whose telephone number is (703) 308-2464. The examiner can normally be reached on Monday through Friday from 9:30 AM to 5:00 PM.

Serial Number: 08/915,683

Page 6

Art Unit: 1113

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Janet C. Baxter, can be reached on (703) 308-2303. The fax phone number for this Group is (703) 305-3599.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (703) 308-0661.

A handwritten signature in black ink, appearing to read "Mark F. Huff", is positioned above the printed name and title.

Mark F. Huff
Primary Examiner
Group Art Unit 1113

mfh
December 3, 1997